

Water Quality Assurance Revolving Fund Report

A.R.S. §§ 49-281 to 49-296

Mission

To safeguard public health, protect the environment, and restore natural resources through investigation and remediation of soil and groundwater that is contaminated with hazardous substances.

Program Description

Through the Water Quality Assurance Revolving Fund (WQARF) Program, the Arizona Department of Environmental Quality (ADEQ) identifies, assesses, and cleans up soil and groundwater that is contaminated with hazardous substances. The program conducts these efforts state-wide with support from state funds and also oversees privately-funded cleanup efforts. Responsible parties are identified and notified, then legal and technical evidence is gathered for recovery of ADEQ's costs and enforcement of cleanup requirements. Funding is provided to the Arizona Attorney General's Office (AGO), the Arizona Department of Water Resources (ADWR), the Arizona Department of Health Services (ADHS), and, in some circumstances, political subdivisions for the purpose of assisting ADEQ with its remediation efforts.

WQARF was created under the Environmental Quality Act of 1986 to support cleanup efforts in the state. The fund is dependent upon the direct transfer of funds from legislative appropriations, corporate income tax, cost recovery, and special fees.

Beginning in April 1998, a Registry was created as required by A.R.S. § 49-287.01. Sites are added as they complete the Registry listing process which includes scoring, notifying owners and operators within the site, and providing a 30-day public comment period. Currently, there are 33 sites on the Registry.

Program Process Overview

The date that a site is added to the WQARF Registry does not generally indicate the date cleanup is started. Under most circumstances, numerous investigative, planning, community involvement, risk assessment, and legal steps must be executed before a cleanup can begin.

Once in the WQARF program, sites undergo a remedial investigation/feasibility study (RI/FS). An RI/FS is a two-phase investigation conducted by ADEQ or interested parties to investigate the scope of contamination and determine the alternatives for the cleanup. The RI/FS requires extensive technical information that may include soil and groundwater sampling and analysis of both the site property and adjoining areas that may also be contaminated. The objective of the RI/FS is to gather sufficient data to evaluate and select the most appropriate cleanup alternative

for the site. Concurrently, ADEQ is required to conduct extensive potentially responsible party (PRP) searches at most sites.

During and following the RI/FS, legal negotiations may be undertaken in response to a party's request to settle liability early and to gain access to private properties for investigation or cleanup implementation. Community involvement activities take place during investigations and prior to development of the proposed remedial action plan (PRAP), depending on site specific issues. These community involvement efforts may include the formation of community advisory boards (CABs) to assist in relaying information and concerns between the public, ADEQ, and interested parties. ADHS may also have input on the investigative activities because they may evaluate the subsequent data with regards to risk to human health and the environment.

Once the FS is completed and cleanup alternatives are identified, a PRAP is developed. At this point in the process, activities to allow the public to comment on the PRAP are conducted. A record of decision (ROD) documenting the selected cleanup alternative is signed, followed by an allocation process in which past and future costs are distributed among responsible parties.

After the ROD is finalized, extensive design development and review must be undertaken. Several months to several years may be needed to finalize a design, construct the remedy, and start the actual cleanup. After the cleanup is implemented, operation and maintenance may be conducted for a period of time specific to the remedy.

Cleanup Results from Remediation Work at WQARF Sites

■	Millions of gallons of groundwater treated:
129.60	Broadway-Pantano
11.50	Central and Camelback
7.90	Los Reales Landfill
15.60	Payson PCE
527.00	Pinal Creek
9.62	Shannon-Road/Rillito Creek
<u>7.87</u>	West Van Buren
599.09	FY 2003 4th Quarter Total
519.52	FY 2003 3rd Quarter Total
540.86	FY 2003 2nd Quarter Total
<u>528.90</u>	FY 2003 1st Quarter Total
2,176.27	FY 2003 Total

■	Pounds of volatile organic removed from the environment:
50	Central and Camelback
3	Payson PCE
2	Shannon Road-Rillito Creek

<u>627</u>	West Central Phoenix, North Plume
682	FY 2003 4th Quarter Total
672	FY 2003 3rd Quarter Total
949	FY 2003 2nd Quarter Total
<u>1,923</u>	FY 2003 1st Quarter Total
3,554	FY 2003 Total

■ Pounds of metals removed from the environment:

<u>938,250</u>	Pinal Creek
938,250	FY 2003 4th Quarter Total
921,008	FY 2003 3rd Quarter Total
984,883	FY 2003 2nd Quarter Total
<u>1,112,412</u>	FY 2003 1st Quarter Total
3,956,553	FY 2003 Total

■ Tons of contaminated soil removed:

<u>49,251</u>	Vulture Mill
49,251	FY 2003 4th Quarter Total
25,689	FY 2003 3rd Quarter Total
0	FY 2003 2nd Quarter Total
<u>0</u>	FY 2003 1st Quarter Total
74,940	FY 2003 Total

Community Involvement Activities at WQARF Sites

■ Fact Sheets and Public Notices:

2	Broadway-Pantano
1	Central and Camelback
1	East Central Phoenix
1	East Central Phoenix/32nd Street and Indian School Road
1	East Central Phoenix/40th Street and Indian School Road
2	El Camino del Cerro
2	Miracle Mile
2	Park Euclid
2	Shannon Rillito
<u>4</u>	West Van Buren
18	FY 2003 4th Quarter Total
7	FY 2003 3rd Quarter Total
3	FY 2003 2nd Quarter Total
<u>4</u>	FY 2003 1st Quarter Total
32	FY 2003 Total

- Public Meetings:
 - 2 Broadway-Pantano
 - 1 Central and Camelback
 - 1 El Camino del Cerro/Shannon Road-Rillito Creek
 - 1 Estes Landfill
 - 1 Klondyke Tailings
 - 1 Park Euclid
 - 1 Payson PCE/Tonto and Cherry
 - 1 West Central Phoenix
 - 1 West Van Buren
 - 1 Western Avenue Plume
 - 2 Non-Site Specific WQARF
 - 13** **FY 2003 4th Quarter Total**
 - 17** **FY 2003 3rd Quarter Total**
 - 17** **FY 2003 2nd Quarter Total**
 - 9** **FY 2003 1st Quarter Total**
 - 56** **FY 2003 Total**

Legal Activities at WQARF Sites

- Access Agreements:
 - 2 Broadway-Pantano
 - 2** **FY 2003 4th Quarter Total**
 - 4** **FY 2003 3rd Quarter Total**
 - 1** **FY 2003 2nd Quarter Total**
 - 7** **FY 2003 1st Quarter Total**
 - 14** **FY 2003 Total**

- Qualified Business Settlements:
 - 0** **FY 2003 4th Quarter Total**
 - 0** **FY 2003 3rd Quarter Total**
 - 0** **FY 2003 2nd Quarter Total**
 - 0** **FY 2003 1st Quarter Total**
 - 0** **FY 2003 Total**

- Prospective Purchaser Agreements:
 - 0** **FY 2003 4th Quarter Total**
 - 0** **FY 2003 3rd Quarter Total**
 - 0** **FY 2003 2nd Quarter Total**
 - 1** **FY 2003 1st Quarter Total**
 - 1** **FY 2003 Total**

- Consent Decrees/Consent Orders:
 - 0 FY 2003 4th Quarter Total
 - 0 FY 2003 3rd Quarter Total
 - 0 FY 2003 2nd Quarter Total
 - 0 FY 2003 1st Quarter Total
 - 0 FY 2003 Total

- Potentially Responsible Party (PRP) searches started:
 - 0 FY 2003 4th Quarter Total
 - 0 FY 2003 3rd Quarter Total
 - 0 FY 2003 2nd Quarter Total
 - 0 FY 2003 1st Quarter Total
 - 0 FY 2003 Total

Cleanup Results from Remediation Work at Federal Sites

- Millions of gallons of groundwater treated:

.72	Hassayampa Landfill
39.00	Motorola 52 nd St. - OU1
195.60	Motorola 52 nd St. - OU2
1,462.30	North Indian Bend Wash
100.00	Phoenix-Goodyear Airport - South (est.)
109.40	Phoenix-Goodyear Airport - North
569.40	TARP - Tucson Airport Remediation Project
14.40	TIAA/Arizona Air National Guard Tucson
2.10	TIAA/Burr Brown
2.63	TIAA/Former West Cap
<u>145.40</u>	US Air Force Plant 44, Tucson
2,644.55	FY 2003 4th Quarter Total
2,431.69	FY 2003 3rd Quarter Total
3,017.12	FY 2003 2nd Quarter Total
<u>3,688.85</u>	FY 2003 1st Quarter Total
11,782.21	FY 2003 Total

- Pounds of volatile organic removed from the environment:

5,306	161 st Air National Guard
7	Hassayampa Landfill
837	Luke Waterdog
6	Motorola 52 nd Street/OU1
461	Motorola 52 nd Street/OU2
1,489	North Indian Bend Wash
50	Phoenix-Goodyear Airport/South (est.)

269	Phoenix-Goodyear Airport/North
87	TARP - Tucson Airport Remediation Project
<u>192</u>	US Air Force Plant 44, Tucson
8,704	FY 2003 4th Quarter Total
9,401	FY 2003 3rd Quarter Total
2,717	FY 2003 2nd Quarter Total
<u>2,835</u>	FY 2003 1st Quarter Total
23,657	FY 2003 Total

■ Pounds of hazardous substances removed from the environment:

0	FY 2003 4th Quarter Total
1,009	FY 2003 3rd Quarter Total
1,539	FY 2003 2nd Quarter Total
<u>5,052</u>	FY 2003 1st Quarter Total
7,600	FY 2003 Total

■ Pounds of metals removed from the environment:

0	FY 2003 3rd Quarter Total
0	FY 2003 3rd Quarter Total
0	FY 2003 2nd Quarter Total
<u>0</u>	FY 2003 1st Quarter Total
0	FY 2003 Total

■ Tons of contaminated soil removed:

0	FY 2003 4th Quarter Total
65.50	FY 2003 3rd Quarter Total
18.25	FY 2003 2nd Quarter Total
<u>0</u>	FY 2003 1st Quarter Total
83.75	FY 2003 Total

Community Involvement Activities at Federal Sites

■ Fact Sheets and Public Notices:

<u>1</u>	Motorola 52 nd Street
1	FY 2003 4th Quarter Total
2	FY 2003 3rd Quarter Total
0	FY 2003 2nd Quarter Total
<u>1</u>	FY 2003 1st Quarter Total
4	FY 2003 Total

■ Public Meetings:

1	Motorola 52 nd Street
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1	Phoenix Goodyear Airport North and South
<u>1</u>	UCAB - TARP, TIAA, AZ Air National Guard, USAF Plant 44
3	FY 2003 4th Quarter Total
7	FY 2003 3rd Quarter Total
3	FY 2003 2nd Quarter Total
<u>2</u>	FY 2003 1st Quarter Total
15	FY 2003 Total

Legal Activities at Federal Sites

- Access Agreements:

0	FY 2003 4th Quarter Total
0	FY 2003 3rd Quarter Total
0	FY 2003 2nd Quarter Total
<u>0</u>	FY 2003 1st Quarter Total
0	FY 2003 Total

- Prospective Purchaser Agreements:

0	FY 2003 4th Quarter Total
0	FY 2003 3rd Quarter Total
0	FY 2003 2nd Quarter Total
<u>0</u>	FY 2003 1st Quarter Total
0	FY 2003 Total

- Consent Decrees/Consent Orders:

0	FY 2003 4th Quarter Total
0	FY 2003 3rd Quarter Total
0	FY 2003 2nd Quarter Total
<u>0</u>	FY 2003 1st Quarter Total
0	FY 2003 Total

- Applicable or Relevant and Appropriate Requirements:

0	FY 2003 4th Quarter Total
0	FY 2003 3rd Quarter Total
0	FY 2003 2nd Quarter Total
<u>0</u>	FY 2003 1st Quarter Total
0	FY 2003 Total

- Records of Decision (ROD) and ROD Amendments:

0	FY 2003 4th Quarter Total
0	FY 2003 3rd Quarter Total
0	FY 2003 2nd Quarter Total
<u>0</u>	FY 2003 1st Quarter Total

WQARF Registry Site Cleanup Information

Site Name	Date Added to the WQARF Registry	Estimated Duration of Cleanup or Action	Est. Start and Completion Date for Remedial Actions	WQARF Expenditures FY 2003 (contractor dollars)	Estimated Expenditures to Complete Final Cleanup	Comments Regarding Final Cleanup
7 th Street and Arizona Avenue	2000	Unknown	Unknown; ERA evaluation underway	\$79,226.58	Unknown at this time	
16 th Street and Camelback	1999	Unknown	ERA to be completed by 11/02	\$129,683.79	Unknown at this time	Source control may be completed during ERA activities
20 th Street and Factor Avenue	2000	Unknown	ERA to be completed by 7/02	\$399,675.23	Unknown at this time	
Broadway Pantano	1998	SVE system at landfill est. through 2003; groundwater containment system est. through 2020	SVE - spring 2000-2003; groundwater 2002-2020	\$2,111,289.79	Unknown at this time	
Central and Camelback	2000	Unknown	ERA to be completed by 9/02; RI planned	\$602,943.13	Unknown at this time	Pump and treat ERA may be part of the final remedy
East Central Phoenix - 24 th Street and Grand Canal	2000	Unknown	Unknown; ERA evaluation	\$13,363.76	Unknown at this time	
East Central Phoenix - 32 nd Street and Indian School Road	2000	Unknown	Unknown; ERA evaluation	\$82,996.41	Unknown at this time	

Site Name	Date Added to the WQARF Registry	Estimated Duration of Cleanup or Action	Est. Start and Completion Date for Remedial Actions	WQARF Expenditures FY 2003 (contractor dollars)	Estimated Expenditures to Complete Final Cleanup	Comments Regarding Final Cleanup
East Central Phoenix - 38 th Street and Indian School Road	1998	Unknown	Unknown; ERA evaluation underway	\$26,189.11	Unknown at this time	
East Central Phoenix - 40 th Street and Indian School Road	1998	Unknown	Unknown; ERA evaluation underway	\$28,459.25	Unknown at this time	
East Central Phoenix - 40 th Street and Osborn	2000	Unknown	Unknown; ERA evaluation underway	\$22,526.90	Unknown at this time	
East Central Phoenix - 48 th Street and Indian School Road	1999	Unknown	Unknown; ERA evaluation underway	\$1,626.00	Unknown at this time	
East Washington Fluff	1999	Unknown	ERA completed; risk assessment and RI underway	\$25,347.82	Unknown at this time	ERA will likely be part of final remedy
El Camino del Cerro	1998	SVE system at landfill est. through 2006; groundwater containment system est. through 2020	SVE began 1997; groundwater estimated start 2003- 2023	\$255,056.35	Unknown at this time	
Estes Landfill	1998	Unknown	Feasibility study and PRAP to be completed by 11/02	\$118,016.43	Unknown at this time	
Klondyke Tailings	1998	Unknown	ERA evaluation to be completed by 6/03	\$288,706.46	Unknown at this time	

Site Name	Date Added to the WQARF Registry	Estimated Duration of Cleanup or Action	Est. Start and Completion Date for Remedial Actions	WQARF Expenditures FY 2003 (contractor dollars)	Estimated Expenditures to Complete Final Cleanup	Comments Regarding Final Cleanup
Los Reales Landfill	1999	Groundwater containment system through 2030	RAP approved by ADEQ 4/95; RA implemented 1999, est. through 2030	\$560.55	Unknown at this time	
Miracle Mile	1998	Unknown	Estimated construction start 4Q05; completion date unknown	\$570,368.55	Unknown at this time; estimated ERA cost \$300,000	
Park-Euclid	1999	Unknown	Estimated start 2Q04, completion date unknown	\$625,285.66	Unknown at this time	
Payson PCE	1998	Interim groundwater pump and treat estimated 10 yrs.; final remedy est. 20 yrs.	Groundwater pump and treat began October 1998; SVE began 8/01; feasibility study and PRAP to be completed by 10/02	\$419,355.69	Groundwater pump and treat estimated \$5.275 million; source area SVE estimated \$700,000	Groundwater pump and treat system operational for a portion of the final cleanup; IGA between ADEQ and Town of Payson to provide clean water from systems to drinking water supply
Pinal Creek	1998	Groundwater pump and treat estimated 30 yrs.	Remedial action plan dated 1990; ERA began in 1998	\$64,342.51	Pump and treat, source controls, APP program requirements, estimated \$100-190 million	Groundwater pump and treat - recycling and release of water
Shannon Road-Rillito Creek	1999	Unknown until further investigation is conducted	Unknown until further investigation is conducted	\$318,506.02	Unknown at this time	

Site Name	Date Added to the WQARF Registry	Estimated Duration of Cleanup or Action	Est. Start and Completion Date for Remedial Actions	WQARF Expenditures FY 2003 (contractor dollars)	Estimated Expenditures to Complete Final Cleanup	Comments Regarding Final Cleanup
Silverbell Jail Annex Landfill	1999	SVE system at landfill est. through 2004; groundwater containment system est. through 2030	Unknown until further investigation is conducted	\$19,940.14	Unknown at this time	
South Mesa	1998	Unknown	Feasibility study and PRAP to be completed by 10/02	\$143,069.70	Unknown at this time	
Tonto Drive and Cherry Street	2000	Unknown	Feasibility study and PRAP to be completed by 10/02	\$30,977.77	Unknown at this time	
Tyson Wash	1998	Unknown	ERA and RI to be completed by 11/02	\$172,855.04	Unknown at this time	
Vulture Mill	1998	One year	Construction to begin 12/02	\$1,703,446.98	Unknown at this time	
West Central Phoenix - East Grand Avenue	1998	SVE system in operation for 3 yrs. per system	RI to be completed by 10/02	\$107,654.08	Unknown at this time	
West Central Phoenix - North Canal Plume	1998	Unknown	RI to be completed by 10/02	\$54,022.30	Unknown at this time	
West Central Phoenix - North Plume	1998	Unknown	ERA underway; RI to be completed by 4/03	\$707,459.85	Unknown at this time	
West Central Phoenix - West Grand Avenue	1998	Unknown	RI to be completed by 10/02	\$32,218.54	Unknown at this time	

Site Name	Date Added to the WQARF Registry	Estimated Duration of Cleanup or Action	Est. Start and Completion Date for Remedial Actions	WQARF Expenditures FY 2003 (contractor dollars)	Estimated Expenditures to Complete Final Cleanup	Comments Regarding Final Cleanup
West Central Phoenix - West Osborn Complex	1998	Unknown	RI underway	\$39,218.30	Unknown at this time	
West Van Buren	1998	Unknown	RI underway	\$545,620.13	Unknown at this time	
Western Avenue Plume	1998	Unknown	RI underway	\$88,856.44	Unknown at this time	

Inter-Governmental Agreement Information

Party to Agreement	Date of Agreement	Subject of Agreement	Term of Agreement	Expenditures FY2003	Est. Total Agreement Expenditures	Comments
Salt River Project	1999	CAP water purchase	under negotiation	\$75,084.00	Est. \$180,000	#99-0227
Town of Payson	1998	Procedures for groundwater treatment systems will be owned, operated, maintained, and repaired	6/30/03	\$125,00.00	Est. \$125,000	Open Agreement #02-0004

Emergency Response

WQARF monies are used for all reasonable costs incurred in remedial actions taken in response to a release or threat of a release of a hazardous substance or pollutant that presents an emergency to the public health or the environment.

WQARF Expenditures Administered in FY 2003-Third Quarter, A.R.S. §49-282.E.11

Initial FY2003 WQARF Budget	\$250,000.00
FY 2003 Amount Paid	\$0.00
Balance Available	\$250,000.00
FY 2003 Amount Denied	\$0.00

FY 2003 APPLICATIONS STATUS					
Municipality/ Applicant	Incident Location	Status	Application Amount	Date Paid	Material
City of Phoenix	4621 W. Paradise Lane	denied	\$1,332.00		gasoline
City of Phoenix	1708 W. Sonora (alley)	denied	\$831.00		urethane foam resin
City of Phoenix	21602 N. 9 th Avenue	denied	\$985.00		lacquer
City of Phoenix	4310 W. McDowell	denied	\$897.00		muratic acid
City of Phoenix	13 th Avenue and Lincoln	denied	\$1,285.00		paint solvent
City of Phoenix	4715 N. First Avenue (alley)	denied	\$783.00		muratic acid
City of Phoenix	323 N. 4 th Avenue	denied	\$467.00		titanium tetrachloride
City of Phoenix	1845 N. 28 th Drive	denied	\$5,820.00		waste oil
City of Phoenix	3436 E. Hubbell	denied	\$1,091.00		waste oil
City of Phoenix	418 E. Broadway	denied	\$3,675.00		waste oil
City of Phoenix	Whitten Drive west of 28 th Avenue	denied	\$2,440.00		waste oil
City of Phoenix	N. of E. Elwood, E. of S. 7 th Street	denied	\$1,667.80		paint products
City of Phoenix	Madison St. between 50 th and 51 st Streets	denied	\$2,428.80		waste oil and antifreeze
City of Phoenix	4006 N. 14 th Avenue (alley)	denied	\$1,381.45		paint solvent, liquid acid
City of Phoenix	4858 W. Paradise Lane	denied	\$1317.20		five gallon chlorine

City of Phoenix	17 th and Jackson Streets	denied	\$1,220.50		two drums of petroleum
City of Phoenix	4418 N. 63 rd Avenue	denied	\$1,161.30		fuel conditioner
Town of Clifton	MP 170 US191	Pending	\$3,967.00		sodium cyanide
Frys Fire District	4817 Apache Street	Pending	\$1,221.06		refrigerator ammonia

Appendix A

Emergency Response

ADEQ established a Registry of sites in Arizona with groundwater and/or soil contamination. Sites appearing on the Registry qualify for funds from the state's Water Quality Assurance Revolving Fund (WQARF) for the remediation or cleanup of contamination.

7th Street and Arizona Avenue

Boundaries: The site is located in downtown Tucson, approximately one-third mile north of Broadway Boulevard and approximately three-fourths mile east of Interstate 10. The site was placed on the Registry in 2000 with a score of 40 out of a possible 120.

Contaminants: The current contaminants of concern in groundwater include tetrachloroethene (PCE), trichloroethene (TCE), and cis-1,2-dichloroethene (cis-1,2-DCE). Contaminants of concern at the site may change as new data become available.

16th Street and Camelback

Boundaries: The site is bounded approximately by Medlock Drive to the north, 17th Street to the east, Highland Avenue to the south, and 14th Place to the west. The site was placed on the Registry in April 1999 with a score of 23 out of a possible 120.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE), 1,2-dichloropropane (1,2-DCP) and 1,2-dichloroethane (1,2-DCA). Contaminants of concern at the site may change as new data become available.

20th Street and Factor Avenue

Boundaries: The site is located approximately one-half mile south of 16th Street (U.S. Highway 95) and approximately three-quarters of a mile east of Fourth Avenue (Interstate 8 Business Loop) in Yuma, Arizona. The site boundary is a northwest-trending oval extending approximately 1,000 feet from the Houston International facility at 655 E. 20th Street on the southeast to 19th Street and Rail Avenue on the northwest. The site was placed on the Registry in 2000 with a score of 31 out of a possible 120.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE), trichloroethene (TCE) and cyanide. Contaminants of concern at the site may change as new data become available.

Broadway - Pantano

Boundaries: The site is located in east-central Tucson and is bounded approximately by Speedway Boulevard to the north, Pantano Wash to the east, Broadway Boulevard to the south, and Sahuara Avenue (one half mile to the west of Wilmot Road) to the west. The site consists of the closed municipal Broadway North Landfill (BNLF) and the three groundwater contaminant plumes located north of Broadway Boulevard. The site was placed on the Registry

in 1998 with a score of 48 out of a possible 120. The site was rescored for the June 2001 Registry with an E&E score of 57.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE), trichloroethene (TCE), vinyl chloride, methylene chloride and cis-1,2-dichloroethene (cis-1,2-DCE). Contaminants of concern at the site may change as new data become available.

Central and Camelback

Boundaries: The site is bounded approximately by Missouri Avenue to the north, a line 100 feet east of Central Avenue to the east, Pierson Street to the south, and by a line 600 feet west of Central Avenue to the west. The southwest corner source area portion of the site was placed on the Registry in January 1999 with an Eligibility and Evaluation (E&E) score of 31 out of a possible 120. The site was rescored for the June 2001 Registry with an E&E score of 32 and includes the entire Central and Camelback WQARF site.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride. Other contaminants present due to past releases from gasoline underground storage tanks in the area include benzene, toluene, ethylbenzene, total xylenes, methyl tertiary butyl ether (MTBE), and 1,2-dichloroethane (1,2-DCA).

East Central Phoenix (ECP) - 24th Street and Grand Canal

Boundaries: The boundaries of the site approximate a circle about 400 feet in diameter, centered around Salt River Project (SRP) well 16E-6.8N. The actual center of the circle is approximately 30 feet to the east of 24th Street and ten feet to the north of the Grand Canal. The site was placed on the Registry in May 2000 with a score of 29 out of a possible 120.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE). Contaminants of concern at the site may change as new data become available.

ECP 32nd Street and Indian School Road

Boundaries: The site has two, separate areas of groundwater contamination. The northwest plume is shaped like an ellipse with its axis oriented northeast-southwest. The ellipse is approximately 200 feet wide by 350 feet long. The northeastern edge is approximately 150 feet south of Monterosa Street and 50 feet west of 32nd Street. The southwestern edge is approximately 75 feet north of Indian School Road and 350 feet west of 32nd Street. The southeastern plume is also shaped like an ellipse with its axis oriented northeast-southwest. The southeastern plume is approximately 200 feet wide by 500 feet long. The northeastern edge of this plume is approximately 25 feet south of Indian School Road and 100 feet east of 32nd Street. The southwestern edge is approximately 400 feet south of Indian School Road and 200 feet west of 32nd Street. The site was placed on the Registry in May 2000 with a score of 29 out of a possible 120.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE). Contaminants of concern at the site may change as new data become available.

ECP 38th Street and Indian School Road

Boundaries: The site is bounded approximately by Indian School Road to the north, 38th Street to the east, Picadilly Road to the south and 36th Street to the west. The site was placed on the Registry in 1998 with a score of 20 out of a possible 120. The site was rescored for the June 2001 Registry with an E&E score of 25.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE). Contaminants of concern at the site may change as new data become available.

ECP 40th Street and Indian School Road

Boundaries: The site is bounded approximately by Devonshire Avenue to the north, 40th Street to the east, Amelia Avenue to the south, and 38th Street to the west. The site was placed on the Registry in 1998 with a score of 20 out of a possible 120. The site was rescored for the June 2001 Registry with an E&E score of 25.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE) and trichloroethene (TCE). Contaminants of concern at the site may change as new data become available.

ECP 40th Street and Osborn Road

Boundaries: The boundaries of the site approximate a circle about 800 feet in diameter centered around SRP well 17.9E-7.5N. The actual center of the circle is approximately 400 feet to the west of 40th Street and 50 feet to the south of Osborn Road. The site was placed on the Registry in May 2000 with a score of 30 out of a possible 120.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE). Contaminants of concern at the site may change as new data become available.

ECP 48th Street and Indian School Road

Boundaries: The site is bounded approximately by a line 450 feet north of Indian School Road to the north, a line 300 feet west of 48th Street to the east, a line 150 feet south of Indian School Road to the south and 45th Place to the west. The site was placed on the Registry in April 1999 with a score of 27 out of a possible 120. The site was rescored for the June 2001 Registry with an E&E score of 32.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE). Contaminants of concern at the site may change as new data become available.

East Washington Fluff

Boundaries: The site is bounded approximately by Buckeye Road to the north, 5th Street to the east, Pima Street to the south and a set of railroad tracks to the west. The site was placed on the Registry in June 1999 with a score of 22 out of a possible 120. The site was rescored for the June 2001 Registry with an E&E score of 34.

Contaminants: The current contaminants of concern at this site include lead, cadmium, arsenic and PCBs. Contaminants of concern at the site may change as new data become available.

El Camino del Cerro

Boundaries: The site is bounded approximately by the Rillito River to the north, Shannon Road to the east, El Camino del Cerro Road to the south, and the Santa Cruz River to the west. The closed El Camino del Cerro Landfill occupies approximately 20 acres of land in the southwest portion of the site area, north of El Camino del Cerro Road between the Santa Cruz River and I-10. The site was placed on the Registry in 1998 with a score of 71 out of a possible 120.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE), trichloroethene (TCE), 1,1-dichloroethene (1,1-DCE), vinyl chloride and benzene. Contaminants of concern at the site may change as new data become available.

Estes Landfill

Boundaries: The site is bounded approximately by the Salt River to the north, the 153 Expressway to the east, Magnolia Street to the south, and 40th Street to the west. Groundwater contamination from the landfill extends in an oval shape for approximately one-half mile to the west and north of the landfill. The site was placed on the Registry in 1998 with a score of 45 out of a possible 120. The site was rescored for the June 2001 Registry with an E&E score of 50.

Contaminants: The current contaminants of concern at this site include vinyl chloride, cis-1,2-dichloroethene (DCE), trichloroethene (TCE), benzene, bis(2-ethylhexyl)phthalate, arsenic, barium, chromium, lead, manganese, and thallium. Contaminants of concern at the site may change as new data become available.

Klondyke Tailings

Boundaries: The site is located on the north bank of Aravaipa Creek, approximately 4.5 miles upstream of the Aravaipa Canyon Wilderness Area. The boundaries of this site are irregular. The site is comprised of two piles of mine tailings, the soil between and adjacent to these piles, and the area approximately 50 feet into the stream bed of Aravaipa Creek, directly adjacent to the tailings piles. The site is bounded to the east and north by the Klondyke county road. The site is bounded to the east by Klondyke Road. The site was listed on the Registry in 1998 with a score of 69 out of a possible 120.

Contaminants: The current contaminants of concern at the site include, antimony, arsenic, beryllium, cadmium, copper, lead, manganese, nickel, zinc, and acidity. Contaminants of concern may change as new data become available.

Los Reales Landfill

Boundaries: The site is located on the southeast side of Tucson, south of Interstate 10 at Craycroft road (Craycroft turns into Los Reales Road going south from Interstate 10). The site includes an active municipal sanitary landfill located at 5300 East Los Reales Road consisting of approximately 380 acres. The City of Tucson owns and operates the landfill. The site was placed on the Registry in 1999 with a score of 32 out of a possible 120.

Contaminants: The current contaminants of concern at this site include volatile organic compounds (VOCs), primarily tetrachloroethene (PCE) and trichloroethene (TCE). Contaminants of concern at the site may change as new data become available.

Miracle Mile

Boundaries: The site is bounded approximately by Roger Road to the north, Flowing Wells Road to the east, Prince Road to the south, and Bottletree Lane to the west. The site was placed on the Registry in 1998 with a score of 62 out of a possible 120.

Contaminants: The current contaminants of concern at this site include trichloroethene (TCE) and chromium. Contaminants of concern at the site may change as new data become available.

Park - Euclid

Boundaries: The site is bounded approximately by Broadway Boulevard to the north, Santa Rita Avenue to the east, 14th Street to the south and Euclid Avenue to the west. The site includes facilities located at both 299 and 301 South Park, where three companies have conducted laundry and dry-cleaning operations since the late 1930s. The site was placed on the Registry in April 1999 with a score of 51 out of a possible 120.

Contaminants: The current contaminants of concern at this site include diesel fuel and volatile organic compounds (VOCs), primarily tetrachloroethene (PCE), trichloroethene (TCE) and 1,2-dichloroethene (1,2-DCE). Contaminants of concern at the site may change as new data become available.

Payson PCE

Boundaries: The site is located in Payson, Arizona and is bounded approximately by Main Street to the north, Beeline Highway (State Route 87) to the east, slightly south of Aero Drive to the south and McLane Road to the west. The site was placed on the Registry in 1998 with a score of 63 out of a possible 120.

Contaminants: The current contaminants of concern at the site include tetrachloroethene (PCE) and MTBE. Contaminants of concern at the site may change as new data become available.

Pinal Creek

Boundaries: The site is located in the Globe-Miami area of Gila County and has irregular boundaries. Within the southern portion of the site, the boundary follows and includes the entire mine sites of Phelps Dodge Miami, Inc. (Phelps Dodge Miami Mine, formerly known as the Inspiration Mine) and BHP Copper, Inc. (the Miami Mine, the Copper Cities Mine, the Old Dominion Mine and related properties and the Solitude Tailings). The southern boundary follows the southern margin of the floodplain of Bloody Tanks Wash through the town of Miami and the community of Claypool, then turns south to include the BHP Solitude Tailings. The boundary follows the eastern margin of the floodplain of Russell Gulch and Miami Wash northward to the confluence with Pinal Creek. The boundary parallels both sides of upper Pinal Creek to the city of Globe, including the Old Dominion Mine and related mine properties in the Globe Hills. North of the confluence of Miami Wash and Pinal Creek, the boundary parallels Pinal Creek on both sides including the floodplain of Pinal Creek plus a margin approximately 1,000 feet wide surrounding the floodplain as far north as Inspiration Dam. North of Inspiration

Dam, the boundary follows the floodplain of Pinal Creek. The northern boundary terminates at the Salt River. The site was placed on the Registry in 1998 with a score of 97 out of a possible 120.

Contaminants: The current contaminants of concern at this site include aluminum, iron, manganese, copper, cobalt, nickel, cadmium, sulfate, acidity, dissolved solids, arsenic, lead, and zinc. Contaminants of concern at the site may change as new data become available.

Shannon Road - Rillito Creek

Boundaries: The site extends approximately one-quarter mile to the north and south of Rillito Creek, and is bounded approximately by Meadowbrook Park to the east and Peglar Wash Park to the west. The site was placed on the Registry in April 1999 with a score of 53 out of a possible 120.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE), trichloroethene (TCE) and dichloroethene (DCE). Contaminants of concern at the site may change as new data become available.

Silverbell Jail Annex Landfill

Boundaries: The site is located on the west side of Tucson, west of Interstate 10, three miles north of Grant Road, and along the eastern side of Silverbell Road. The site was placed on the Registry in 1999 with a score of 51 out of a possible 120.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE) and trichloroethene (TCE). Contaminants of concern at the site may change as new data become available.

South Mesa

Boundaries: The site is bounded approximately by 10th Drive to the north, Solomon to the east, and the railroad south of Baseline to the south and west. The site was placed on the Registry in 1998 with a score of 26 out of a possible 120. The site was rescored for the June 2001 Registry with an E&E score of 31.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE), trichloroethene (TCE), chromium, and nickel. Contaminants of concern at the site may change as new data become available. Other contaminants at the site include regionally high levels of nitrates due to past agricultural land use.

Tonto Drive and Cherry Street

Boundaries: The site is located in Payson, Arizona and is approximately 150 feet of Colcord Road just north of Frontier Street. The site boundary is a northwest-trending oval, extending approximately 850 feet from the intersection of Colcord Road and Frontier Street. The site was placed on the Registry in June 2000 with a score of 45 out of a possible 120.

Contaminants: The current contaminants of concern at the site include tetrachloroethene (PCE). Contaminants of concern at the site may change as new data become available.

Tyson Wash

Boundaries: The site is bounded approximately by the groundwater plume which extends 300 feet to the north of Cowell Lane to the north, 400 feet east of Washington Boulevard to the east, 300 feet south of Cowell Lane to the south, and 200 feet west of Oregon Avenue to the west. The known groundwater contamination exists northwest of the intersection of State Hwy. 95 and Business Route I-10 in the town of Quartzsite, Arizona. The site was added to the Registry in 1998 with a score of 46 out of a possible 120.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE) and trichloroethene (TCE). Contaminants of concern may change as new data become available.

Vulture Mill

Boundaries: The site is located just east of North Tegner (Highways 89 & 93) about one mile northwest of the center of the town of Wickenburg. The eastern boundary of the site is approximately one-quarter mile west of the Hassayampa River Channel. The southern boundary of the site is just north of Genung Street. The site is on private land owned by four separate parties. The tailings and affected soil are found in an area about 35 acres on up to five separate properties. The site was placed on the Registry in 1998 with a score of 65 out of a possible 120.

Contaminants: The current contaminants of concern at this site include lead and arsenic. Contaminants of concern at the site may change as new data become available.

West Central Phoenix (WCP) - East Grand Avenue

Boundaries: The site is bounded approximately by Whitton Avenue to the north, 27th Avenue to the east, Catalina Road to the south, and 33rd Drive to the west. The site was placed on the Registry in 1998 with a score of 26 out of a possible 120. The site was rescored for the June 2001 Registry with an E&E score of 31.

Contaminants: The current contaminants of concern in groundwater include the chlorinated solvents tetrachloroethene (PCE), trichloroethene (TCE) and 1,1-dichloroethene (1,1-DCE). Contaminants of concern at the site may change as new data become available. Other contaminants at the site include benzene, toluene, and ethylbenzene, and nitrates.

WCP North Canal Plume

Boundaries: The site is bounded approximately by Indian School Road to the north, 35th Avenue to the east, Osborn Road to the south and 40th Avenue to the west. The site was placed on the Registry in 1998 with a score of 22 out of a possible 120. The site was rescored for the June 2001 Registry with an E&E score of 27.

Contaminants: The current contaminants of concern in groundwater include the chlorinated solvents tetrachloroethene (PCE), trichloroethene (TCE), 1,1-dichloroethene (1,1-DCE) and chromium. Contaminants of concern at the site may change as new data become available. Other contaminants at the site include methyl tertiary butyl ether (MTBE) and nitrates.

WCP North Plume

Boundaries: The site is bounded approximately by Hazelwood Street to the north, 38th Avenue to the east, Indian School Road to the south and 43rd Avenue to the west. The site was placed on the Registry in 1998 with a score of 50 out of a possible 120. The site was rescored for the June 2001 Registry with an E&E score of 55.

Contaminants: The current contaminants of concern in groundwater include the chlorinated solvents tetrachloroethene (PCE), trichloroethene (TCE), 1,1-dichloroethene (1,1-DCE) vinyl chloride, and chromium. Contaminants of concern at the site may change as new data become available. Other contaminants at the site include: benzene, toluene, ethylbenzene, total xylenes, methyl tertiary butyl ether (MTBE), and nitrates.

WCP West Grand Avenue

Boundaries: The site is bounded approximately by Van Buren Street to the north, Seventh Avenue to the east, Buckeye Road to the south and 75th Avenue to the west. In addition, a finger shaped plume exists between Seventh and 27th Avenues between Buckeye and Lower Buckeye Roads. The site was placed on the Registry in 1998 with a score of 17 out of a possible 120. The site was rescored for the June 2001 Registry with an E&E score of 22.

Contaminants: The current contaminants of concern in groundwater include the chlorinated solvents tetrachloroethene (PCE), trichloroethene (TCE), 1,1-dichloroethene (1,1-DCE), 1,1-dichloroethane (1,1-DCA), and vinyl chloride. Contaminants of concern at the site may change as new data become available. Contaminants of concern at the site may change as new data become available.

WCP West Osborn Complex (WOC)

Boundaries: The site is bounded approximately by the Grand Canal to the north, 34th Drive to the east, Virginia Avenue to the south and 51st Avenue to the west. The site was placed on the Registry in 1998 with a score of 47 out of a possible 120. The site was rescored for the June 2001 Registry with an E&E score of 52. ADEQ provides regulatory oversight and technical review of investigations and site activities performed by United Industrial Corporation at the WCP West Osborn Complex site.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE) and trichloroethene (TCE). Contaminants of concern at the site may change as new data become available. Other current contaminants include methyl tertiary butyl ether (MTBE) from underground storage tanks and nitrates.

West Van Buren

Boundaries: The site is bounded approximately by I-10 to the north, Seventh Avenue to the east, Buckeye Road to the south and 75th Avenue to the west. In addition, a finger shaped plume exists between 11th Avenue and 35th Avenue and between Buckeye and Lower Buckeye Roads. The site was placed on the Registry in 1998 with a score of 50 out of a possible 120.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE), trichloroethene (TCE), 1,1-dichloroethene (1,1-DCE), 1,1-dichloroethane (1,1-DCA), cis-1,2-dichloroethene (cis-1,2-DCE), and chromium. Contaminants of concern at the site may change as new data become available.

Western Avenue Plume

Boundaries: The Western Avenue Plume site begins on the western edge of Avondale on Western Avenue and extends onto the Phoenix-Goodyear Airport property. A wedge-shaped plume, it is bounded by the groundwater contamination that extends from approximately 350 feet east of 3rd Avenue to the Phoenix-Goodyear Airport property to the west, 350 feet north of Western Avenue at the northern-most edge, to 1000 feet south of Western Avenue at the southern-most edge. The site was placed on the Registry in 1998 with a score of 51 out of a possible 120.

Contaminants: The current contaminants of concern at this site include tetrachloroethene (PCE). Contaminants of concern at the site may change as new data become available.